



# Choose Your Own Reality: How Digital Curation is Warping and Influencing Our Perception

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# Abstract

*This paper will focus on the real-life effects of news consumption due to the digital curation of news headlines on media platforms. In this paper, I plan to address the effects that occur when media platforms curate news for their consumers versus consumers curating their own news feed and how that all ties into the spread of fake news and misinformation. If media platforms create the algorithms to curate the news headlines for public consumption, what responsibility do they have to ensure that their sources are not only factual but also unbiased? In conjunction with this, I also want to hit on the “paywall” trend that digital media platforms have all adopted. Now, not only are their curation strategies affecting the way that people interpret major events and news occurrences, the paywalls can severely limit how much information people are even able to consume about these major events and news occurrences. Without access to viable news sources, the general public is left to find news from whatever source is readily available to them.*

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What does it mean to digitally curate your news feed? Each selection of FACEBOOK pages to follow and unfollow is an act of digital curation. Each like and interaction with a post is sending feedback information to FACEBOOK’s algorithm for your news feed. So, as you customize what stories you want to see and from who you want to hear them, the algorithm is learning what types of posts you’ll be most likely to want to see in the future. Many social media platform users are familiar with notices of “algorithm changes” from the media platform, informing them that their news feed will seem different due to a change in how the media platform is deciding what to show you and when to show it to you.

With the prevalence of people using online platforms to get their daily intake of news, many media platforms have come under fire for their algorithms and curation strategies. Media platforms such as FACEBOOK, Twitter, Yahoo News, and Apple News create algorithms that allow them to cull news headlines from across the country and the world in order to deliver news to their subscribers, daily readers, and visitors to their platforms.

Merriam Webster's Dictionary defines an algorithm as "a procedure for solving a mathematical problem (as of finding the greatest common divisor) in a finite number of steps that frequently involves repetition of an operation". Basically, an algorithm is a set of steps that are created to solve a problem. This means that someone has to identify a problem that needs to be solved and then create a solution for said problem. For news media platforms, this means that they create algorithms to solve the problem of what news stories their customers may want to read. Unfortunately, these algorithms can include just as much implicit bias as the humans that created them. Media platforms have created algorithms that will cull news sites and present headlines and articles to their patrons, seemingly based on their actual interaction with the media platform. However, we know that those algorithms are not solely based on the patron's interactions with the website, but also based on the media platform's own calculation or prediction of what they think you want to see, read, or interact with while you're using their website.

After the 2016 elections, many people began to become aware of just how much “fake news” had saturated online media platforms. In the fallout of this, media platforms have been called to testify to congress and have been forced to reckon with how they curate their news headlines and deliver them to the general public. In *The Science of Fake News*, David M. J. Lazer, et al reported that “One study evaluating the dissemination of prominent fake news stories estimated that the average American encountered between one and three stories from known publishers of fake news during the month before the 2016 elections” (Lazer, et al, pg 1095). They go on to state further, “Another study reported that false information on Twitter is typically retweeted by many more people, and far more rapidly than true information, especially when the topic is politics”. It seems that algorithms have learned their audience so well, that they can detect the type of articles that people would want to read, hence the massive amount of retweets. However, when the algorithms are sending news articles, riddled with fake news, wherein lies the fault? With the news platform that increases the article’s exposure by placing it in prominent positions in people’s newsfeeds, or the patron who doesn’t fully read or understand the validity of it, but is retweeting the article anyway?

In these politically polarizing times, patrons are deciding who to interact with on social media platforms and thus also deciding on what type of news to believe. People tend to value the views and opinions of people directly within their social circles. With self curation of their social media profiles, patrons are selectively deciding whose news they want to be exposed to. When trusted friends and family post or retweet a news article, patrons are more likely to share it on their profile as well.



With each passing year, people are getting more comfortable with receiving news and information from online sources. Every major television network has an online presence, with many also running social media profiles to further disseminate the news and information pertinent to its audience. In Fake News Detection on Social Media: A Data Mining Perspective, Kai Shu et al note that “social media now outperforms television as the major news source”, (Shu et al, pg 22). They continue, “However, because it is cheap to provide news online and much faster and easier to disseminate through social media, large volumes of fake news, i.e. those news articles with intentionally false information, are produced online for a variety of purposes, such as financial and political gain”, (Shu et al, pg 22). They continue, “However, because it is cheap to provide news online and much faster and easier to disseminate through social media, large volumes of fake news, i.e. those news articles with intentionally false information, are produced online for a variety of purposes, such as financial and political gain”, (Shu et al, pg 22).

Unsuspecting patrons and platform algorithms see the popularity of news articles and push them further into virality with each retweet, post share, and reaction. Some people are able to read news articles and determine that the news is fake or contains a high amount of false claims, but many users are not able to determine which news is fake versus real. Plus, as Shu et al note, “some fake news was just created to trigger people’s distrust and make them confused, impeding their abilities to differentiate what is true from what is not”, (pg 22).

With fake news being created specifically to trick readers, is there any onus on the social media platforms to create algorithms that seek out fake news and remove it? Or, should readers be responsible for ascertaining what is real or fake when it comes to what they share on social media platforms? And, if patrons are responsible, then what penalty is there for their participation in the spreading of fake news to their followers and friends? I think, in order to begin to find some sort of remediation for the spread of fake news, we would have to go back to the beginning and decide why people and platforms are cultivating news feeds to reflect and boost certain news and information over other news and information.

In 1989, Tim Berners-Lee created what would go on to become the World Wide Web. What began as a way to help scientists share data became the ubiquitous behemoth that we know today as simply, the internet. However, Berners-Lee has since come to regret his role in what is the present day's internet. In a 2018 Vanity Fair article, Berners-Lee discusses his fight to return the internet to its open source roots. "The spirit there was very decentralized. The individual was incredibly empowered. It was all based on there being no central authority that you had to go to ask permission" (Booker, 2018). He continues, "That feeling of individual control, that empowerment, is something we've lost." Berners-Lee feels that with so much financial influence over what is placed online and who gets to see what's online, corporations have essentially purchased the internet and decide what is seen and by whom. In order to decentralize the internet and return the power to the people, Berners-Lee states, "Looking at the ways algorithms are feeding people news and looking at accountability for the algorithms -- all of that is really important for the open Web," (Booker, 2018).

Berners-Lee makes a great case for the decentralization of the internet and for why citizens should be up in arms over the companies that make billions of dollars off of the data that is collected and shared online by everyday users. Factor in the act of media platforms purposefully curating news articles to share to their readers and you can see why Berners-Lee has vowed to bring back the power to the people. So, if we can, somehow, manage to decentralize the internet, will that stop the spread of “fake news”? I’m reluctant to think it’s that simple. Think about why so much fake news gets spread so quickly. It usually comes down to people of like minds, echoing each other with news articles, over and over again.

An echo chamber is described as “a room with sound-reflecting walls used for producing hollow or echoing sound effects —often used figuratively”, (Merriam-Webster, n.d.). Many people have come to use the phrase echo-chamber to describe how people have come to interact online regarding politics. People can select which news outlets to follow online and in turn follow or unfollow family members and friends who agree or disagree with those politics, respectively. Thus creating their own personalized echo chamber of viewpoints that support their ideologies. Bring into the fold the prevalence of fake news and here’s another reason that makes it easy to understand how fake news gets shared so frequently and why it’s so easy for people to buy into it.

The “fake news”, regardless of whether it leans left or right, is created to reaffirm the reader’s beliefs and then the reader passes it along to their network via a Twitter retweet or FACEBOOK post share. Those readers absorb the information and then go on to reshare it on social media, perpetuating the echo chamber’s effects.

Any legitimate effort focused on stopping the spread of fake news would have to incorporate a way for algorithms to detect and either remove the fake news or alert the reader to the fact that what they are reading is fake news.

In their article titled *The Spread of Fake News by Social Bots*,

Chengcheng Shao et al discuss how bots have been utilized to spread fake news, specifically in regards to politics and the 2016 United States presidential race. Their research focused on the use of social bots sharing fake news articles on Twitter and the Twitter users who actively engaged with the fake news that the bots shared. The authors state, "If the problem is mainly driven by cognitive limitations, we need to invest in news literacy education; if social media platforms are fostering the creation of echo chambers, algorithms can be tweaked to broaden exposure to diverse views; and if malicious bots are responsible for many of the falsehoods, we can focus attention on detecting this kind of abuse," (Shao et al, 2017, pg 2).

Researchers all seem to be getting to the same conclusion, media platforms bear responsibility in creating or editing existing algorithms that can detect and alert users to fake news articles. In every instance that a consumer logs into a social media website, that user is agreeing to abide by that platform's rules and regulations. In return, users are expecting the information that they receive or are exposed to, to be honest and truthful. After the 2016 election and the numerous Congressional hearings that have taken place over the past 3 years, it seems that media platforms are taking small steps to give patrons more background information on their news sources.

FACEBOOK has added information buttons to each news article that is posted to their platform that gives the reader contextual information about that specific source. This is a, albeit small, step in the right direction. It seems that media platforms are unwilling to alter their algorithms drastically as if to say that any acquiesce would be an admittance of guilt or culpability.

In *Quantifying Search Bias: Investigating Sources of Bias for Political Searches in Social Media*, researchers Juhi Kulshrestha et al point out that, “Recently conducted field studies have shown that not only do users place greater trust in higher ranked search results, but also that user opinions about political candidates can be manipulated by biased rankings of search results,” (Kulshrestha, 2017, pg 417). To put it plainly, users believe that if the link is at the top of the search results page, then it must be the most trusted and best source of information. This is not the case. As stated previously, algorithms are created by humans and humans carry biases that are in turn woven into the fabric of the algorithms that produce the search results. Now, add to that the fact that companies pay to place their websites higher up in Google search results, the image of unadulterated and unbiased results begins to crumble. Further into the article, the researchers note that “These issues have lead researchers, organizations, and even governments toward a new avenue of research called ‘auditing algorithms’, which endeavors to understand if and how an algorithmic system can cause biases, particularly when they are misleading or discriminatory to users,” (Kulshrestha, 2017, pg 419).

It's no longer an issue of which store may get higher sales due to their placement in a Google search result or an ad that they place on FACEBOOK or Twitter. Countries are beginning to see the real life ramifications of algorithms that carry biases, while simultaneously being unable to stop the spread of "fake news" being propagated and shared online by malicious bots. But, are we ready to accept that algorithms, which seem so powerful in every other aspect of life, simply cannot detect "fake news" nor that the user sharing the fake news is a bot? Or, is fake news simply too valuable to the bottom line? When an article reaches virality, people get drawn back to the source website. A decent portion of those users will end up subscribing to that website, which will in turn make advertisers want to place ads on those sites so that people will see their products or services and purchase them. Those same advertisers will also pay to place ads on FACEBOOK or Twitter in order to reach even more people. With so much money entangled in the spread of fake news, it's easy to see how companies would be less than enthused to quell the spread of fake news. However, what if the targets of fake news were able to fight back? Lazer et al propose, in *The Science of Fake News*, just that. On page 1096 they write, "An alternative to direct government regulation would be to enable tort lawsuits alleging, for example, defamation by those directly and concretely harmed by the spread of fake news."

One way that some researchers are trying to seek understanding of biases in algorithms and "fake news" is by studying algorithms in other types of websites.

In “Be Careful; Things Can Be Worse Than They Appear” -- Understanding Biased Algorithms and Users’ Behavior Around Them in Rating Platforms, researchers Motahhare Eslami, Kristen Vaccaro, Karrie Karahalios, and Kevin Hamilton studied algorithms in hotel rating systems. Their research in the article is centered around consumers using the hotel booking website and then rating their stay at the hotels listed on the website. Knowing that algorithms are used to rate the hotels, the researchers also wanted to study how users of the website reacted to biases in algorithms that directly affected them.

What they were able to find is that users, after becoming aware of the algorithm’s bias, wanted to warn or advise future users of that knowledge. On page 67 they write, “Confronted by a bias in their review score, reviewers tried to understand how the rating algorithm works. They, however, did not do this solely for personal knowledge; they aimed to make others aware of the bias as well.” If consumers are adept at discerning algorithm bias in hotel review ratings, how is it that people can’t seem to see the algorithm biases and fake news on social media sites? And, most important, how come when other users inform them of “fake news” and algorithm biases, why do they seem to dig in and retreat further into the false narratives presented to them? As an avid reader and consumer of news myself, one way to ensure that I limit the amount of fake news I am exposed to, is to subscribe to verifiable news sources and check the sources of articles that are shared from family and friends in my news feed on FACEBOOK or Twitter. And I am not the only one. As more and more consumers begin to digitally curate their own news feeds and actively select which news outlets to patronize, we are all becoming more and more acquainted with “paywalls”.

Merriam Webster's Dictionary defines paywall as "a system that prevents Internet users from accessing certain Web content without a paid subscription." Since print media is quickly becoming digital media, publishers have moved to limit the amount of free content that gets shared online and on social media platforms. Paywalls are what news outlets such as The New York Times, The Washington Post, Time Magazine, and so on have put in place in order to limit the number of free articles consumers have access to online. Financially, these paywalls make sense as a way to recoup some of the hardship the print media industry has suffered due to the prevalence of online news consumption. But, one can't help but wonder, with this being such a precarious time for reliable news consumption, are paywalls unintentionally increasing the spread of fake news because consumers will turn to other sites that are free, but less reliable as a trustworthy source?

In Paywalls and public knowledge: How can journalism provide quality news for everyone?, Rodney Benson addresses the very question of what news people are able to consume if everything is behind a paywall. "The upside of the subscription model is that readers are only going to pay money for something they really want or need. This provides a strong incentive for news organizations to produce the highest quality journalism." On the surface, this makes sense. However, Benson continues, "The downside, though, is that subscriber-funded news caters to relatively high-income, high-education elites. Even if subscriptions contribute to higher quality news, if that news fails to reach a broad audience, it's not really a solution to the civic crisis of an uninformed, often misinformed, and distrustful citizenry," (Benson, 2019, pg 147).



What Benson seems to be arguing is that paywalls are contributing to the divide of what type of news people are consuming. With these paywalls, consumers are being lumped into camps of those who can afford news subscriptions and thus gain access to verifiable news articles and those who can't. One may even argue that this is not something that needs to be a concern of the masses. Unfortunately, as we saw with the 2016 election, not having access to legitimate news sources does indeed have far reaching effects. Benson argues against leaving higher quality news locked behind paywalls and uses a 2012 Pew Research Center report to bolster his argument, which found that subscribers to the New York Times, the Wall Street Journal, and NPR (National Public Radio) had a higher awareness of public affairs, as well as higher median incomes and higher levels of education (Benson, 2019, pg 147). He summarizes it bluntly, "Putting more and more of the highest quality media behind paywalls will likely further widen this knowledge gap," (Benson, 2019, pg 147). It seems, pretty obviously, that in order for democracy to survive and thrive, citizens need to have access to trusted news sources that deliver news and information that is factual.

What does it mean to curate your own news feed? In *Digital Narrating for Contentious Politics: Social Media Content Curation at Movement Protests*, Tin-yuet Ting defines curation as "a new media practice" that involves "finding, categorising, and organising relevant online content on specific issues," (Ting, 2015). Ting's article examines the effects that digital curation can have on a social movement. When organizers use social media to galvanize their followers, they are in essence curating content for their followers to then read, watch, and then share with others, in order to get even more followers.

Ting's article examines the effects that digital curation can have on a social movement. When organizers use social media to galvanize their followers, they are in essence curating content for their followers to then read, watch, and then share with others, in order to get even more followers. This creates a community of sorts and establishes legitimacy to the movement. "Curating and choreographing with protest images on Facebook therefore facilitated the symbolic interactions and emotional exchanges among activists for maintaining movement solidarity and consolidating activist identity," (Ting, 2015). Ting lets us know that digital curation does not have to be a bad thing. However, when it becomes combined with biased algorithms and "fake news", the downside can be quite sobering.

Should it be seen as a bad thing to want to receive news and alerts from websites that you trust and present information in a manner that you can understand and agree with? With this being a type of new frontier for consumers, as well as news outlets and media platforms, we as a society have to come to terms with this process being widespread while also creating a way for legitimate, factual news information to place at the forefront.



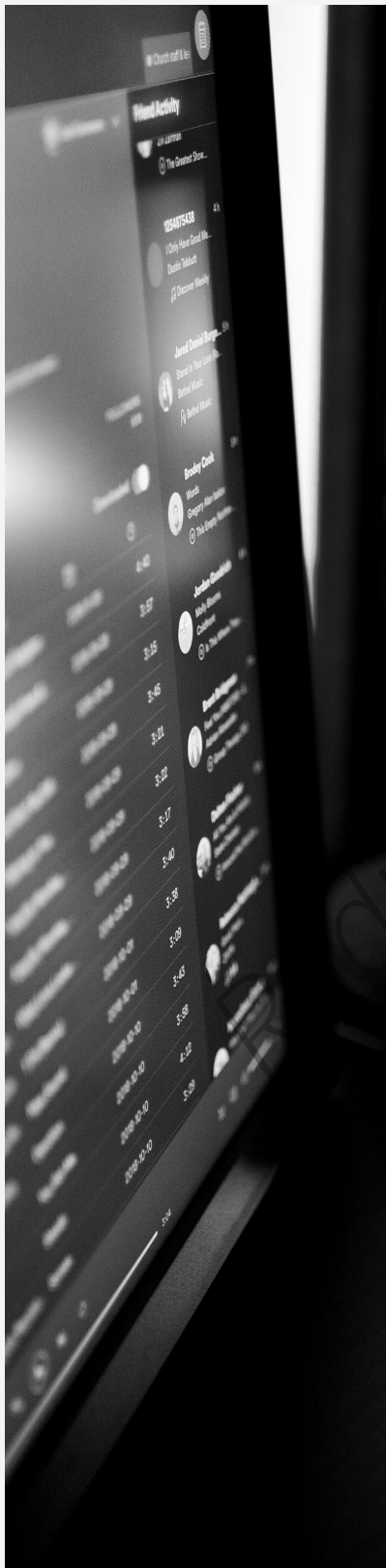
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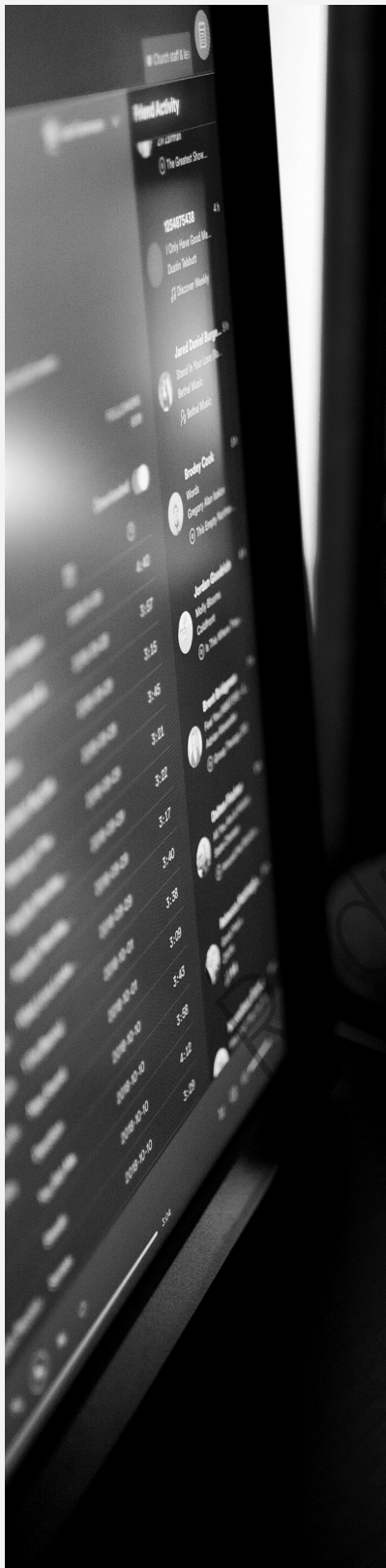
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